



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/985,676	11/05/2001	Pankaj Patel	0023-0056	3995

44987 7590 06/03/2005

HARRITY & SNYDER, LLP
11240 WAPLES MILL ROAD
SUITE 300
FAIRFAX, VA 22030

EXAMINER

ISMAIL, SHAWKI SAIF

ART UNIT	PAPER NUMBER
----------	--------------

2155

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/985,676	Applicant(s) PATEL ET AL.	
	Examiner Shawki S. Ismail	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

the

DETAILED ACTION

1. This communication is responsive to the application filed on November 5, 2001. Claims 1-23 are presented for examination.

Claim Rejections - 35 USC §102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-23, are rejected under 35 U.S.C. 102(e) as being anticipated by **Ferguson et al.**, (Ferguson) U.S. Patent No. **6,798,777**.

4. As to claim 13, Ferguson teaches a network device comprising:

an input portion configured to receive data structures and to transmit data items associated with the data structures (see Fig. 2b, col. 5, line 61 – col. 6, line 13);

a plurality of processing engines, each processing engine being configured to receive a plurality of data items from the input portion and to contemporaneously compute routes for the plurality of data items (see Fig. 9, col. 14, lines 8-27);

a resource configured to receive requests from the plurality of processing engines (see Fig. 9); and

a result processor configured to modify the data structures based on the routes computed by the plurality of processing engines (see Fig. 11, result processor 1506).

Art Unit: 2155

5. As to claim 14, Ferguson teaches the network device of claim 13, wherein each of the plurality of processing engines includes multiple context-switched engines (col. 14, lines 8-27).

6. As to claim 15, Ferguson teaches the network device of claim 13, wherein the memory includes random access memory (col. 11, lines 48-63).

7. As to claim 16, Ferguson teaches the network device of claim 13, wherein each of the plurality of processing engines includes:

a data processor configured to calculate a route for one key at a time (col. 14, lines 1-27),

a functional control state machine configured to control operation of the data processor (col. 13, lines 4-67), and

a context buffer configured to store a partially calculated route from the data processor and a processing state from the functional control state machine (col. 14, lines 28-46).

8. As to claim 17, Ferguson teaches the network device of claim 13, wherein each of the plurality of processing engines further includes:

a context switch controller configured to cause the data processor and the functional control state machine to respectively store the partially calculated route and the processing state in the context buffer when the data processor requests data from the memory (col. 13 lines 4-67).

9. As to claim 18, Ferguson teaches the network device of claim 13, wherein each of the plurality of processing engines further includes:

Art Unit: 2155

an output buffer configured to store a fully calculated route for output to the result processor (see Fig. 3, output buffer 312).

10. As to claims 1-12 and 19-23, they are essentially the method and underlying system of the device in claims 13-18; therefore, they are rejected under the same rationale.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawki S Ismail whose telephone number is 571-272-3985. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shawki Ismail
Patent Examiner
May 31, 2005




BHARAT BAROT
PRIMARY EXAMINER